

STN - Search
DO NOT Remove

=> Uploading C:\Program Files\Stnexp\Queries\098346391-1.str

L1 STRUCTURE UPLOADED

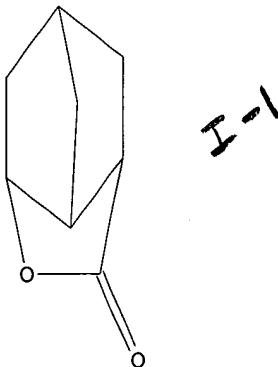
=> que L1

L2 QUE L1

=> d

L2 HAS NO ANSWERS

L1 STR



I-1

Structure attributes must be viewed using STN Express query preparation.

L2 QUE ABB=ON PLU=ON L1

=> s 12

SAMPLE SEARCH INITIATED 13:29:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5051 TO ITERATE

19.8% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

9 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 96761 TO 105279
PROJECTED ANSWERS: 505 TO 1313

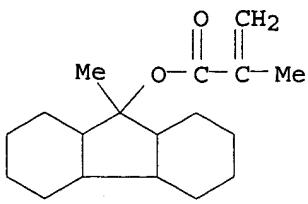
L3 9 SEA SSS SAM L1

=> d 13

L3 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2002 ACS
RN 460096-52-0 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
MF (C18 H28 O2 . C14 H20 O3 . C12 H14 O4)x
CI PMS
PCT Polyacrylic
SR CA
LC STN Files: CAPLUS

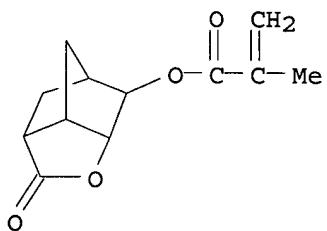
CM 1

CRN 460096-50-8
CMF C18 H28 O2



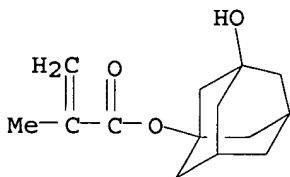
CM 2

CRN 254900-07-7
CMF C12 H14 O4



CM 3

CRN 115372-36-6
CMF C14 H20 O3



1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL USPATFULL CAPLUS HCAPLUS

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE
ENTRY

1.96

TOTAL
SESSION
2.17

FILE 'USPATFULL' ENTERED AT 13:29:37 ON 10 OCT 2002

CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 13:29:37 ON 10 OCT 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'HCAPLUS' ENTERED AT 13:29:37 ON 10 OCT 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> d his

(FILE 'HOME' ENTERED AT 13:28:23 ON 10 OCT 2002)

FILE 'REGISTRY' ENTERED AT 13:28:51 ON 10 OCT 2002

L1 STRUCTURE UPLOADED
L2 QUE L1
L3 9 S L2

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:29:37 ON 10 OCT 2002

=> s 13
L4 22 L3

=> s 14 and (resist or photoresist)
L5 12 L4 AND (RESIST OR PHOTORESIST)

=> hide duplicates
HIDE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (>).

=> duplicate
ENTER REMOVE, IDENTIFY, ONLY, OR (?) :remove
ENTER L# LIST OR (END) :15
DUPLICATE PREFERENCE IS 'USPATFULL, CAPLUS, HCAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N) :n
PROCESSING COMPLETED FOR L5
L6 7 DUPLICATE REMOVE L5 (5 DUPLICATES REMOVED)

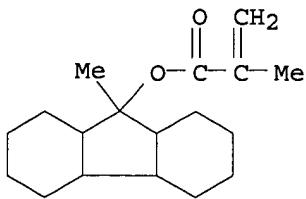
=> d 16 1-7 ibib abs hitstr

L6 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
ACCESSION NUMBER: 2002:708833 CAPLUS
TITLE: Chemical compounds for photoresists and
 resin compositions for photoresists
INVENTOR(S): Tsutsumi, Kiyoharu; Itokazu, Teruo
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002265530	A2	20020918	JP 2001-62435	20010306
AB	The compds. are 2-(meth)acryloyloxy-tricyclo[7.4.0.03,8]tridecanes optionally having 2-hydrocarbyl (C1-10) substitutions. Thus, 2-methacryloyloxy-2-methyltricyclo[7.4.0.03,8]tridecane and its copolymer with 5-methacryloyloxy-3-oxatricyclo[4.2.1.04,8]nonane-2-one were prep'd.			
IT	460096-52-0P RL: IMF (Industrial manufacture); PREP (Preparation) ((meth)acryloyloxytricyclotridecanes and polymers for photoresists)			
RN	460096-52-0 CAPLUS			
CN	INDEX NAME NOT YET ASSIGNED			

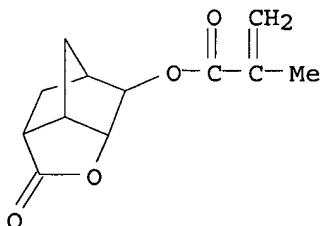
CM 1

CRN 460096-50-8
CMF C18 H28 O2



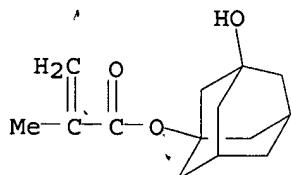
CM 2

CRN 254900-07-7
CMF C12 H14 O4



CM 3

CRN 115372-36-6
CMF C14 H20 O3



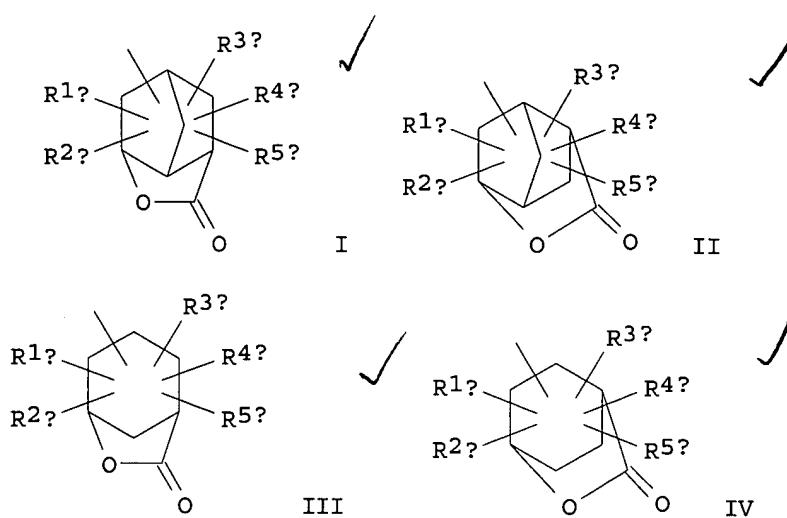
L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
 ACCESSION NUMBER: 2002:673049 CAPLUS
 DOCUMENT NUMBER: 137:208381
 TITLE: Storage-stable chemically amplified UV positive
 photoresist compositions with good
 post-exposure stability for halftone exposure
 INVENTOR(S): Sato, Kenichiro; Kodama, Kunihiko
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 87 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002251013	A2	20020906	JP 2001-48880	20010223

GI

2/6/02

2/23/01



AB The compns. comprise (A) resins contg. alicyclic hydrocarbon groups and groups selected from I, II, III, and IV (R1b, R2b, R3b, R4b, R5b = H, alkyl, cycloalkyl, alkenyl), which increase their alkali solv. by acid decomprn. and (B) photoacid generators selected from triarylsulfonium salts, phenacylsulfonium salts, and non-arom. sulfonium salts.

IT **454470-90-7P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(storage-stable chem. amplified UV pos. photoresists with good post-exposure stability for halftone exposure)

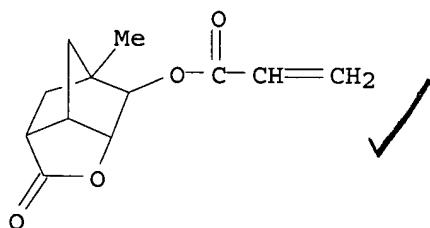
RN 454470-90-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with bicyclo[2.2.1]hept-2-ene, 2,5-furandione, hexahydro-5-methyl-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate, hexahydro-6-methyl-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and hexahydro-6a-methyl-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 392309-90-9

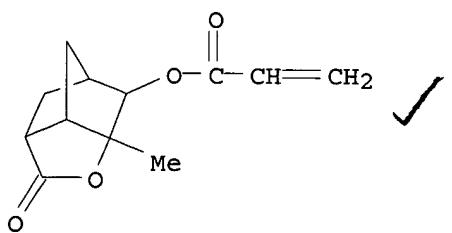
CMF C12 H14 O4



CM 2

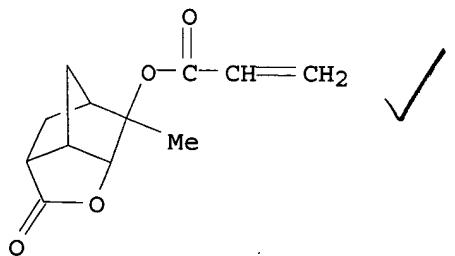
CRN 392309-89-6

CMF C12 H14 O4



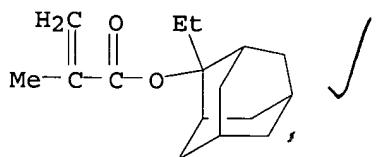
CM 3

CRN 392309-87-4
CMF C₁₂ H₁₄ O₄



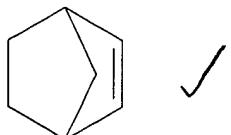
CM 4

CRN 209982-56-9
CMF C₁₆ H₂₄ O₂



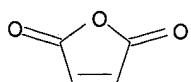
CM 5

CRN 498-66-8
CMF C₇ H₁₀



CM 6

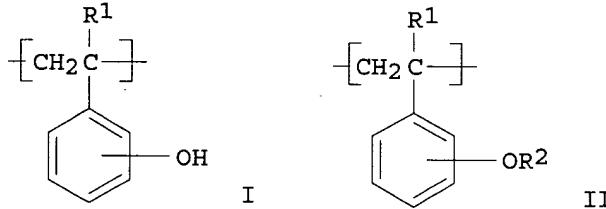
CRN 108-31-6
CMF C₄ H₆ O₃



L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
 ACCESSION NUMBER: 2002:253088 CAPLUS
 DOCUMENT NUMBER: 136:286596
 TITLE: Radiation sensitive resin composition
 INVENTOR(S): Miyaji, Masaaki; Nagai, Tomoki; Yada, Yuji; Numata, Jun; Nishimura, Yukio; Yamamoto, Masafumi; Ishii, Hiroyuki; Kajita, Toru; Shimokawa, Tsutomu
 PATENT ASSIGNEE(S): JSR Corporation, Japan
 SOURCE: Eur. Pat. Appl., 71 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1193558	A2	20020403	EP 2001-122213	20010917
EP 1193558	A3	20020814		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002202604	A2	20020719	JP 2000-401302	20001228
JP 2002162746	A2	20020607	JP 2001-280035	20010914
US 2002058201	A1	20020516	US 2001-953941	20010918
PRIORITY APPLN. INFO.:			JP 2000-282689 A	20000918
			JP 2000-401302 A	20001228

GI



AB A chem. amplified radiation sensitive resin compn. comprises a specific copolymer and a photoacid generator, wherein the copolymer contains the recurring unit I and/or II and $\text{CH}_2\text{CR}_1(\text{C}: \text{O})\text{NR}_3\text{R}_4$ ($\text{R}_1 = \text{H}, \text{Me}$; $\text{R}_2 = \text{C}_4\text{-}10$ tertiary alkyl; $\text{R}_3,4 = \text{H}, \text{C}_1\text{-}12$ alkyl, $\text{C}_6\text{-}15$ arom., $\text{C}_1\text{-}12$ alkoxy, or R_3 and R_4 may form, in combination and together with the nitrogen atom with which the R_3 and R_4 groups bond, a $\text{C}_3\text{-}14$ cyclic structure, provided that R_3 and R_4 are not a hydrogen atom at the same time). The compn. effectively responds to various radiations, exhibits excellent resoln. and pattern configuration and minimal iso-dense bias, and can form fine patterns at a high precision and in a stable manner.

IT 406198-73-0P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (resin; radiation sensitive resin compn. for photoresist
 contg.)

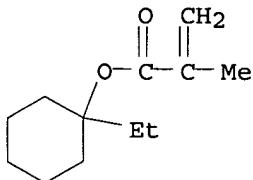
RN 406198-73-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N,N-dimethyl-2-propenamide, 1-ethylcyclohexyl 2-methyl-2-propenoate and hexahydro-2-oxo-3,5-methano-2H-

cyclopenta [b] furan-6-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

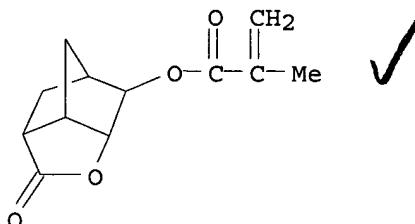
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CRN 274248-09-8
CMF C12 H20 O2



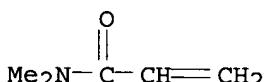
CM 2

CRN 254900-07-7
CMF C12 H14 O4



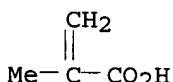
CM 3

CRN 2680-03-7
CMF C5 H9 N O



CM 4

CRN 79-41-4
CMF C4 H6 O2



L6 ANSWER 4 OF 7 USPATFULL

ACCESSION NUMBER: 2002:112468 USPATFULL

TITLE: Radiation-sensitive resin composition

INVENTOR(S): Miyaji, Masaaki, Yokkaichi, JAPAN

Nagai, Tomoki, Yokkaichi, JAPAN

Yada, Yuji, Yokkaichi, JAPAN
Numata, Jun, Yokkaichi, JAPAN
Nishimura, Yukio, Yokkaichi, JAPAN
Yamamoto, Masafumi, Yokkaichi, JAPAN
Ishii, Hiroyuki, Yokkaichi, JAPAN
Kajita, Toru, Yokkaichi, JAPAN
Shimokawa, Tsutomu, Suzuka, JAPAN

5/16/02
a/18/01

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002058201	A1	20020516
APPLICATION INFO.:	US 2001-953941	A1	20010918 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-282689	20000918
	JP 2000-401302	20001228

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Supervisor, Patent Prosecution Services, PIPER MARBURY RUDNICK & WOLFE LLP, 1200 Nineteenth Street, N.W., Washington, DC, 20036-2412
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 3791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A chemically amplified radiation-sensitive resin composition comprising a specific copolymer and a photoacid generator, wherein the copolymer contains the following recurring unit (1) and/or the recurring unit (2), and the recurring unit (3-1), ##STR1##

wherein R.sup.1 is a hydrogen or methyl, R.sup.2 is a C.sub.4-10 tertiary alkyl, R.sup.3 and R.sup.4 are a hydrogen, C.sub.1-12 alkyl, C.sub.6-15 aromatic, C.sub.1-12 alkoxy, or R.sup.3 and R.sup.4 may form, in combination and together with the nitrogen atom with which the R.sup.3 and R.sup.4 groups bond, a C.sub.3-15 cyclic structure, provided that R.sup.3 and R.sup.4 are not a hydrogen atom at the same time. The composition effectively responds to various radiations, exhibits excellent resolution and pattern configuration and minimal iso-dense bias, and can form fine patterns at a high precision and in a stable manner.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 406198-73-0P

(resin; radiation sensitive resin compn. for photoresist contg.)

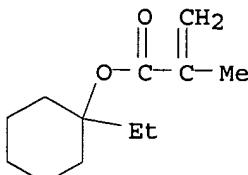
RN 406198-73-0 USPATFULL

CN 2-Propenoic acid, 2-methyl-, polymer with N,N-dimethyl-2-propenamide, 1-ethylcyclohexyl 2-methyl-2-propenoate and hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

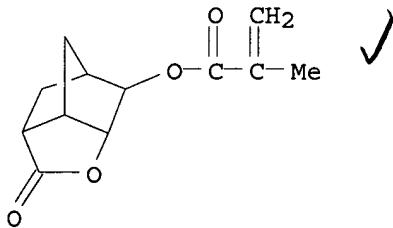
CRN 274248-09-8

CMF C12 H20 O2



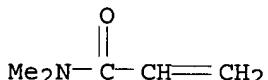
CM 2

CRN 254900-07-7
CMF C12 H14 O4



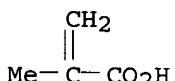
CM 3

CRN 2680-03-7
CMF C5 H9 N O



CM 4

CRN 79-41-4
CMF C4 H6 O2



L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
ACCESSION NUMBER: 2001:280498 CAPLUS
DOCUMENT NUMBER: 134:318676
TITLE: Positive-working far-UV-sensitive photoresist composition containing acid-sensitive resin having lactone group
INVENTOR(S): Aogo, Toshiaki; Sato, Kenichiro; Kodama, Kunihiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001109154	A2	20010420	JP 1999-285762	19991006

AB The title compn. contains a photoacid generator and a resin, which increases the solv. towards an alkali developer reacting with an acid, of a lactone repeating group. The compn., which contains the acid-sensitive resin having lactone group, shows the high sensitivity and provides the

pattern of the high resoln., the good contact with substrate, and little edge roughness.

IT 335163-68-3P, 2-Methyl-2-adamantylmethacrylate-Bicyclo[2.2.1]heptane-2-carboxylic acid,7-hydroxy-.gamma.-lactone, 5-exo-methacrylate ester copolymer
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (pos.-working far-UV-sensitive photoresist compn.)

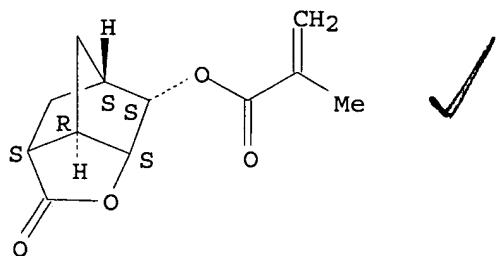
RN 335163-68-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, (3S,3aR,5S,6S,6aS)-hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

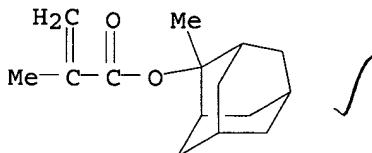
CRN 335163-67-2
 CMF C12 H14 O4

Relative stereochemistry.



CM 2

CRN 177080-67-0
 CMF C15 H22 O2



L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
 ACCESSION NUMBER: 2001:747251 CAPLUS
 DOCUMENT NUMBER: 135:296190
 TITLE: Chemically amplified positive resist composition
 INVENTOR(S): Uetani, Yasunori; Yamada, Airi; Miya, Yoshiko; Takata, Yoshiyuki
 PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
 SOURCE: Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

EP 1143299 A1 20011010 EP 2001-107747 20010402
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 CN 1316675 A 20011010 CN 2001-110230 20010402 * 4/3/01
 US 2001044070 A1 20011122 US 2001-824227 20010403
 JP 2002296783 A2 20021009 JP 2001-104302 20010403
 PRIORITY APPLN. INFO.: JP 2000-101868 A 20000404
 JP 2000-133328 A 20000502
 JP 2000-209505 A 20000711
 JP 2001-14261 A 20010123

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A chem. amplification type pos. **resist** compn. comprises an acid generating agent and a resin having polymeric units (A), (B) and (C). The polymeric unit (A) is an alicyclic lactone selected from polymeric units I and II (R_{1,2} = H, Me; and n = 1-3). The polymeric unit (B) is selected 3-hydroxy-1-adamantyl (meth)acrylate represented by III, IV (R₃ = H, methyl; R₄ = H, hydroxyl; R_{5,6} = H, C₁₋₃ alkyl or hydroxyalkyl, etc.) and a unit derived from unsatd. dicarboxylic acid anhydride selected from maleic anhydride and itaconic anhydride and a polymeric unit of (.alpha.) .beta.- (meth)acryloyloxy-.gamma. -butyrolactone represented by V (R₇ = H, Me). The polymeric unit (C) is the one which becomes alkali-sol. by cleavage of a part of groups by the action of an acid. The pos. **resist** compn. of this invention is excellent in balance of properties such as resoln., profile, sensitivity, dry etching resistance, adhesion, and the like.

IT 364736-27-6P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (chem. amplified pos. **resist** compn. contg.)

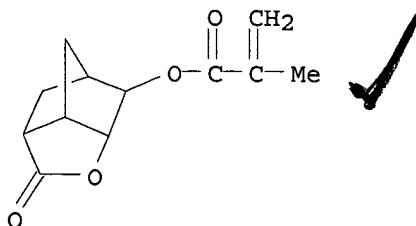
RN 364736-27-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 254900-07-7

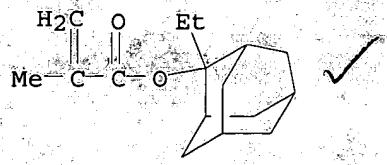
CMF C₁₂ H₁₄ O₄



CM 2

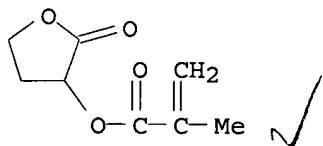
CRN 209982-56-9

CMF C₁₆ H₂₄ O₂



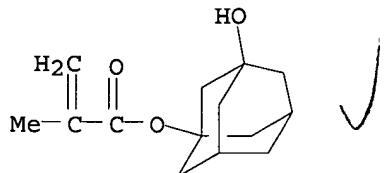
CM 3

CRN 195000-66-9
CMF C8 H10 O4



CM 4

CRN 115372-36-6
CMF C14 H20 O3



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 7 USPATFULL

ACCESSION NUMBER: 2001:212076 USPATFULL

TITLE: Chemically amplified positive resist composition

INVENTOR(S): Uetani, Yasunori, Osaka, Japan
Yamada, Airi, Osaka, Japan
Miya, Yoshiko, Muko-shi, Japan
Takata, Yoshiyuki, Osaka, Japan

	NUMBER	KIND	DATE
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PATENT INFORMATION: US 2001044070 A1 20011122
APPLICATION INFO.: US 2001-824227 A1 20010403 (9)

	NUMBER	DATE
--	--------	------

PRIORITY INFORMATION: JP 2000-101868 20000404
JP 2000-133328 20000502
JP 2000-209505 20000711

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS

CHURCH, VA, 22040-0747

NUMBER OF CLAIMS: 5

EXEMPLARY CLAIM: 1

LINE COUNT: 894

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A chemical amplification type positive resist composition excellent in balance of properties such as resolution, profile, sensitivity, dry etching resistance, adhesion and the like which comprises a resin which has the following polymeric units (A), (B) and (C); and an acid generating agent.

(A): At least one polymeric unit of an alicyclic lactone selected from polymeric units represented by the following formulae (Ia) and (Ib):
##STR1##

(B): At least one polymeric unit selected from a polymeric unit of 3-hydroxy-1-adamantyl (meth)acrylate represented by the following formula (II), a polymeric unit of a combination of a unit represented by the following formula (III) and a unit derived from unsaturated dicarboxylic acid anhydride selected from maleic anhydride and itaconic anhydride and a polymeric unit of (.alpha.).beta.- (meth)acryloyloxy-.gamma.-butyrolactone represented by the following formula (IV):
##STR2##

(C) A polymeric unit which becomes alkali-soluble by cleavage of a part of groups by the action of an acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 364736-27-6P, 2-Ethyl-2-adamantyl methacrylate-3-hydroxy-1-adamantyl methacrylate-5-methacryloyloxy-2,6-norbornanecarbolactone-.alpha.-methacryloyloxy-.gamma.-butyrolactone copolymer
(chem. amplified pos. resist compn. contg.)

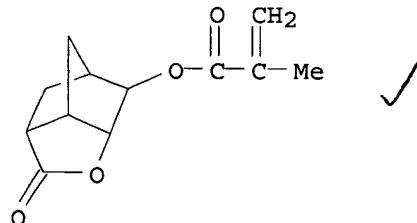
RN 364736-27-6 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 254900-07-7

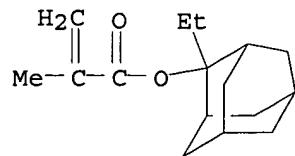
CMF C12 H14 O4



CM 2

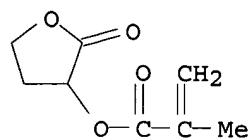
CRN 209982-56-9

CMF C16 H24 O2



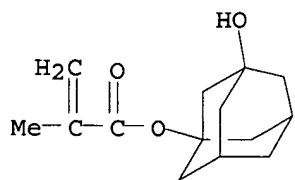
CM 3

CRN 195000-66-9
CMF C8 H10 O4



CM 4

CRN 115372-36-6
CMF C14 H20 O3



=>

L11 ANSWER 1 OF 3 USPATFULL

ACCESSION NUMBER: 2002:16787 USPATFULL

TITLE: Positive photoresist composition
INVENTOR(S): Sato, Kenichiro, Shizuoka, JAPAN
Aoai, Toshiaki, Shizuoka, JAPAN

Present Appeal.

1/24/02
(9) 4-16-01

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002009666	A1	20020124
APPLICATION INFO.:	US 2001-834639	A1	20010416

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-115497	20000417
	JP 2000-215574	20000717
	JP 2000-231670	20000731

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, DC, 20037

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

LINE COUNT: 1642

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided is a positive photoresist composition comprising a resin which contains specific repeating units and whose dissolving rate toward an alkaline developing solution is increased by the action of an acid and a compound which generates an acid upon irradiation with an actinic ray or a radiation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 392309-94-3P

(acid-decomposable resin; pos. photoresist compn. contg.)

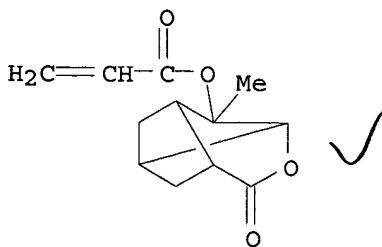
RN 392309-94-3 USPATFULL

CN 2-Propenoic acid, 7-methyl-5-oxo-4-oxatricyclo[4.3.0.03,8]non-7-yl ester, polymer with bicyclo[2.2.1]hept-2-ene, 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-yethyl 2-propenoate and octahydro-1,4,4,6-tetramethyl-1H-5,8a-methanoazulen-6-yl 2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 392309-93-2

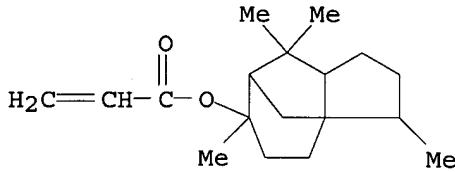
CMF C12 H14 O4



CM 2

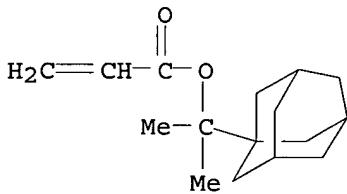
CRN 313698-62-3

CMF C18 H28 O2



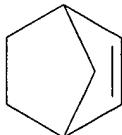
CM 3

CRN 300833-10-7
CMF C16 H24 O2



CM 4

CRN 498-66-8
CMF C7 H10



CM 5

CRN 108-31-6
CMF C4 H2 O3



L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:72739 CAPLUS
 DOCUMENT NUMBER: 136:142610
 TITLE: Positive photoresist composition
 INVENTOR(S): Sato, Kenichiro; Aoai, Toshiaki
 PATENT ASSIGNEE(S): Japan
 SOURCE: U.S. Pat. Appl. Publ., 49 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

*Present
App*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002009666	A1	20020124	US 2001-834639	20010416
JP 2001296661	A2	20011026	JP 2000-115497	20000417
JP 2002031890	A2	20020131	JP 2000-215574	20000717
JP 2002040662	A2	20020206	JP 2000-231670	20000731
PRIORITY APPLN. INFO.:			JP 2000-115497	A 20000417
			JP 2000-215574	A 20000717
			JP 2000-231670	A 20000731

AB Provided is a pos. photoresist compn. comprising a resin which contains specific repeating units and whose dissolving rate toward an alk. developing soln. is increased by the action of an acid and a compd. which generates an acid upon irradn. with an actinic ray or a radiation. The present invention relates to pos. photoresist compn. used in an ultramicroolithog. process, e.g., for the prodn. of VLSI and high capacity microchips processes.

IT 392309-94-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid-decomposable resin; pos. photoresist compn. contg.)

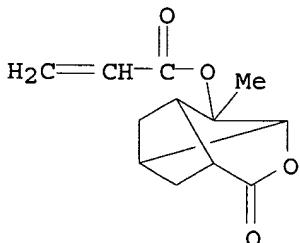
RN 392309-94-3 CAPLUS

CN 2-Propenoic acid, 7-methyl-5-oxo-4-oxatricyclo[4.3.0.03,8]non-7-yl ester, polymer with bicyclo[2.2.1]hept-2-ene, 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-propenoate and octahydro-1,4,4,6-tetramethyl-1H-5,8a-methanoazulen-6-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 392309-93-2

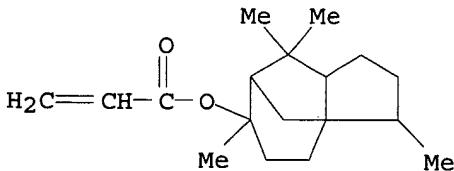
CMF C12 H14 O4



CM 2

CRN 313698-62-3

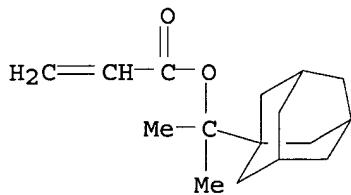
CMF C18 H28 O2



CM 3

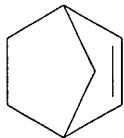
CRN 300833-10-7

CMF C16 H24 O2



CM 4

CRN 498-66-8
CMF C7 H10



CM 5

CRN 108-31-6
CMF C4 H2 O3



L11 ANSWER 3 OF 3 HCPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:72739 HCPLUS
DOCUMENT NUMBER: 136:142610
TITLE: Positive photoresist composition
INVENTOR(S): Sato, Kenichiro; Aoai, Toshiaki
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 49 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

Present application

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002009666	A1	20020124	US 2001-834639	20010416
JP 2001296661	A2	20011026	JP 2000-115497	20000417
JP 2002031890	A2	20020131	JP 2000-215574	20000717
JP 2002040662	A2	20020206	JP 2000-231670	20000731
PRIORITY APPLN. INFO.:			JP 2000-115497	A 20000417
			JP 2000-215574	A 20000717
			JP 2000-231670	A 20000731

AB Provided is a pos. photoresist compn. comprising a resin which contains specific repeating units and whose dissolving rate toward an alk. developing soln. is increased by the action of an acid and a compd. which

generates an acid upon irradn. with an actinic ray or a radiation. The present invention relates to pos. photoresist compn. used in an ultramicroolithog. process, e.g., for the prodn. of VLSI and high capacity microchips processes.

IT 392309-94-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid-decomposable resin; pos. photoresist compn. contg.)

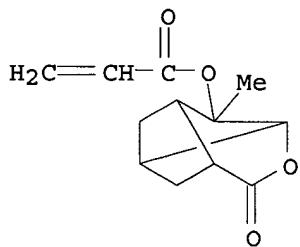
RN 392309-94-3 HCPLUS

CN 2-Propenoic acid, 7-methyl-5-oxo-4-oxatricyclo[4.3.0.03,8]non-7-yl ester, polymer with bicyclo[2.2.1]hept-2-ene, 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-propenoate and octahydro-1,4,4,6-tetramethyl-1H-5,8a-methanoazulen-6-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 392309-93-2

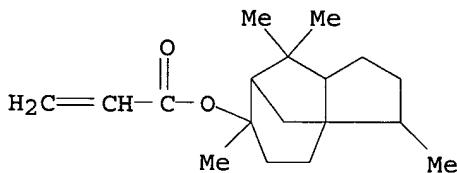
CMF C12 H14 O4



CM 2

CRN 313698-62-3

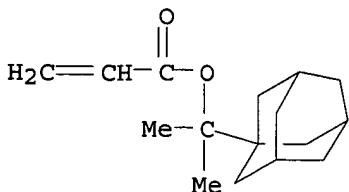
CMF C18 H28 O2



CM 3

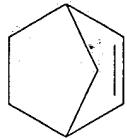
CRN 300833-10-7

CMF C16 H24 O2



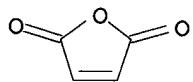
CM 4

CRN 498-66-8
CMF C7 H10



CM 5

CRN 108-31-6
CMF C4 H2 O3



=> d l17 1 ibib abs hitstr

L17 ANSWER 1 OF 1 HCPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:708833 HCPLUS
TITLE: Chemical compounds for photoresists and
resin compositions for photoresists
INVENTOR(S): Tsutsumi, Kiyoharu; Itokazu, Teruo
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
----- ----- -----
JP 2002265530 A2 20020918 JP 2001-62435 20010306

AB The compds. are 2-(meth)acryloyloxy-tricyclo[7.4.0.0_{3,8}]tridecanes
optionally having 2-hydrocarbyl (C1-10) substitutions. Thus,
2-methacryloyloxy-2-methyltricyclo[7.4.0.0_{3,8}]tridecane and its copolymer
with 5-methacryloyloxy-3-oxatricyclo[4.2.1.0_{4,8}]nonane-2-one were prep'd.

IT 460096-52-0P

RL: IMF (Industrial manufacture); PREP (Preparation)
(meth)acryloyloxytricyclotridecanes and polymers for
photoresists)

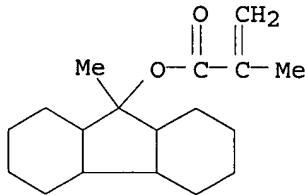
RN 460096-52-0 HCPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 460096-50-8

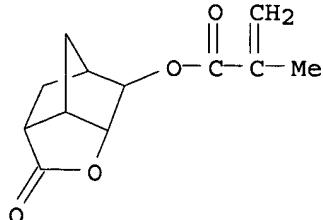
CMF C18 H28 O2



CM 2

CRN 254900-07-7

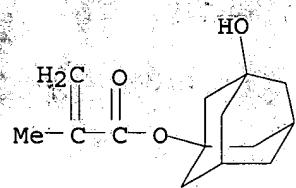
CMF C12 H14 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



ACCESSION NUMBER: 1996:296125 CAPLUS

DOCUMENT NUMBER: 125:86434

TITLE: Cycloadditions of 6H-1,3,4-oxadiazin-6-ones

(4,5-diaza-.alpha.-pyrones). Part 15. Reactions of
6H-1,3,4-oxadiazin-6-ones with norbornadiene. A new
route to 3,6-disubstituted .alpha.-pyronesAUTHOR(S): Christl, Manfred; Bodenschatz, Gabriele; Fenineis,
Erich; Hegmann, Joachim; Huettner, Gerhard;

Mertelmeyer, Stefan; Schaetzlein, Klaus

CORPORATE SOURCE: Institut Organische Chemie, Universitaet Wuerzburg,
Wuerzburg, D-97074, GermanySOURCE: Liebigs Annalen (1996), (5), 853-861
CODEN: LANAEM; ISSN: 0947-3440

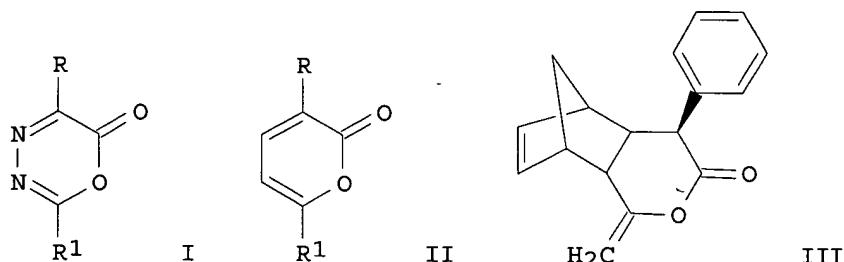
PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:86434

GI



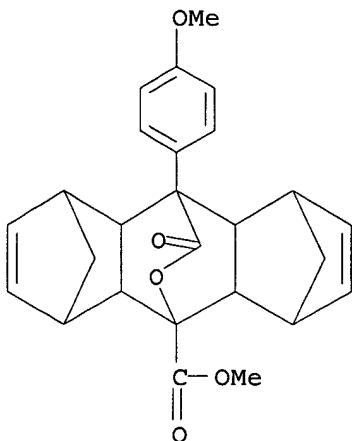
AB The oxadiazinones I ($R = Me, Ph, 4-C_6H_4OMe, 4-C_6H_4NO_2, CHMe_2$; $R_1 = CO_2Me, Ph, 4-C_6H_4NO_2, 4-C_6H_4Br, Me$) were converted into the .alpha.-pyrones II upon reaction with norbornadiene. For this purpose, solns. of the substrates were treated with $BF_3 \cdot Et_2O$ or F_3CCO_2H . The smooth formation of .alpha.-pyrones was also obsd. when a .gamma.-oxo ketene, initially generated by heating a soln. of the substrates in the absence of $BF_3 \cdot Et_2O$ was allowed to react with the Lewis acid. Without acid, only II ($R = 4-C_6H_4NO_2, R_1 = Ph$) was obtained free from further compds., whereas in the other cases enol lactones and 1:2 products were formed addnl. Oxadiazinone I ($R = Ph, R_1 = Me$) gave enol lactone III in the noncatalyzed reaction.

IT 178413-65-5P

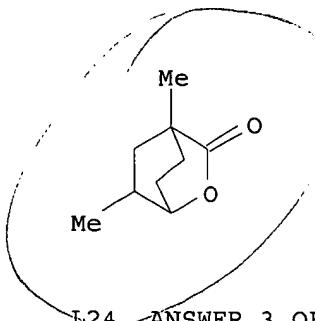
RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. of .alpha.-pyrones by Diels-Alder reaction of oxadiazinones
with norbornadiene)

RN 178413-65-5 CAPLUS

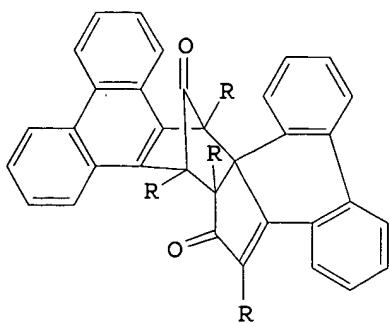
CN 10,9-(Epoxymethano)-1,4:5,8-dimethanoanthracene-10(1H)-carboxylic acid,
4,4a,5,8,8a,9,9a,10a-octahydro-9-(4-methoxyphenyl)-12-oxo-, methyl ester,
(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.,9.alpha.,9a.beta.,1
0.alpha.,10a.beta.)- (9CI) (CA INDEX NAME)



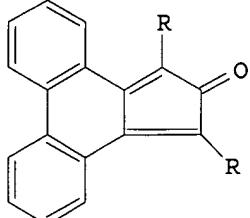
L24 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
 ACCESSION NUMBER: 1980:214496 CAPLUS
 DOCUMENT NUMBER: 92:214496
 TITLE: Hydrochlorination and lactonization of
 3-cyclohexenecarboxylic acid. II. Reactions of
 1-methyl- and 1,2-, 1,3-, 1,4-, and
 1,5-dimethyl-3-cyclohexenecarboxylic acids
 AUTHOR(S): Ismailov, A. G.; Rustamov, M. A.; Ahmedov, A. A.
 CORPORATE SOURCE: Azerb. Politekh. Inst., Baku, USSR
 SOURCE: Zh. Org. Khim. (1980), 16(1), 68-73
 CODEN: ZORKAE; ISSN: 0514-7492
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The regiochem. and stereochem. of the title reactions were examd. The conformation of the starting material influenced the product compn.
 IT 73683-62-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 73683-62-2 CAPLUS
 CN 2-Oxabicyclo[2.2.2]octan-3-one, 4,6-dimethyl- (9CI) (CA INDEX NAME)



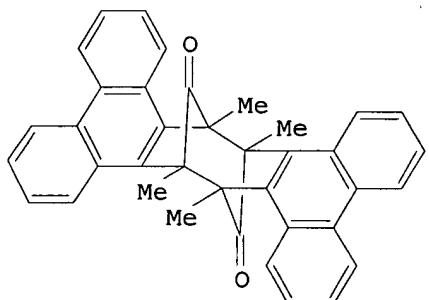
L24 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
 ACCESSION NUMBER: 1977:484712 CAPLUS
 DOCUMENT NUMBER: 87:84712
 TITLE: o-Quinonoid compounds. Part 12. Diels-Alder
 additions to 1,3-dimethylcyclopenta[1]phenanthren-2-one
 AUTHOR(S): Jones, David W.
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Leeds, Leeds, Engl.
 SOURCE: J. Chem. Soc., Perkin Trans. 1 (1977), (9), 980-7
 CODEN: JCPRB4
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



I



II



IV

AB Trapping expts. with N-phenylmaleimide, 1-phenyltriazoline-2,5-dione, and cyclopentadiene showed that the Diels-Alder dimer I ($R = Me$) of 1,3-dimethylcyclopenta[1]phenanthren-2-one (II; $R = Me$) is in rapid equil. with II ($R = Me$) at 20.degree. but no color accompanied dimer dissocn. Endo addn. of nonconjugated dienophiles is more important for II ($R = Me$) than for 2,5-dimethyl-3,4-diphenylcyclopentadienone (III) supporting the view that steric effects assocd. with noncoplanar Ph groups in III impede endo addn. Thermolysis or photolysis of II ($R = Me$) gave the formal [4 + 4].pi. dimer IV. II ($R = Et$) also exists as the dissocg. [4 + 2].pi. dimer I ($R = Et$) but II ($R = Me_2CH$) is a sterically stabilized monomer which shows the same reactivity towards dienophiles as I ($R = Me$). The NMR spectra of I ($R = Me, Et$) are rationalized in terms of a Cope rearrangement.

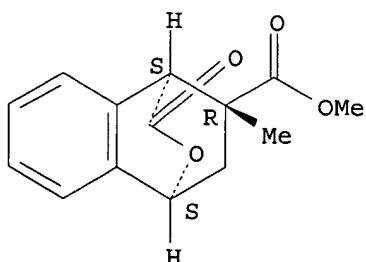
IT 63902-29-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. of)

RN 63902-29-4 CAPLUS

CN 1,4-Ethano-1H-2-benzopyran-9-carboxylic acid, 3,4-dihydro-9-methyl-3-oxo-, methyl ester, (1.alpha.,4.alpha.,9S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



ACCESSION NUMBER: 1968:114143 CAPLUS
DOCUMENT NUMBER: 68:114143
TITLE: Highly condensed polycyclic systems. I.
Tetra-cyclo[6.4.0.04,12.05.9]dodec-10-enes
AUTHOR(S): Akhtar, I. A.; Fray, Gordon I.; Yarrow, J. M.
CORPORATE SOURCE: Univ. Bristol, Bristol, Engl.
SOURCE: J. Chem. Soc. C (1968), (7), 812-15
CODEN: JSOOAX
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Generation of the bicyclo[6.4.0]dodeca-4,9,11-triene system from
cis,cis-cycloocta-1,5-diene, using tetracyclone, 1,2,3,4-tetrachloro-5,5-
dimethoxycyclopentadiene, or .alpha.-pyrone, is followed by an intramol.
Diels-Alder reaction and results in the formation of
tetracyclo[6.4.0.04,12.05.9]dodec-10-enes (I).
IT 18326-48-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. of)
RN 18326-48-2 CAPLUS
CN 4,3,7-[1]Propanyl[3]ylidenecyclopenta[b]pyran-7a(2H)-carboxylic acid,
3-chlorohexahydro-2-oxo-, methyl ester (8CI) (CA INDEX NAME)

